What is claimed is:

1. A method of manufacturing a printed wiring board, the method comprising the steps of:

providing a base substrate;

forming a through hole in said base substrate;

forming a first conductor layer on a surface of said through hole and a surface of said base substrate in the vicinity of an opening of said through hole;

filling said through hole where said first conductor layer is formed with a photosensitive resin and forming the photosensitive resin on the opening of said through hole where said first conductor layer is formed and on a surface of said base substrate at least in the vicinity of said opening;

exposing said photosensitive resin to light from above said base substrate and developing said photosensitive resin; and

forming a second conductor layer after developing the photosensitive resin, said second conductor layer covering the photosensitive resin filled inside said through hole and said second conductor layer coupled to said first conductor layer.

- 2. The method according to claim 1, wherein said exposing step comprises the steps of:
- (i) exposing said photosensitive resin to light from above said base substrate using a photomask-less process; and
- (ii) exposing said photosensitive resin to light from above said base substrate using a photomask that shields the opening of said through hole from the light.
- 3. The method according to claim 1, wherein said step of forming said first conductor layer comprises the steps

of:

forming a photoresist on the surface of said base substrate except the surface of said through hole and the surface of said base substrate in the vicinity of the opening of said through hole;

forming said first conductor layer by plating on the surface of said through hole and the surface of said base substrate in the vicinity of the opening of said through hole; and

removing said photoresist after forming said first conductor layer.

- 4. The method according to claim 1 further comprising a step of forming a circuit pattern on the surface of said base substrate after developing said photosensitive resin.
- 5. The method according to claim 4, wherein said step of forming a circuit pattern is carried out simultaneously with said step of forming said second conductor layer.
- 6. The method according to claim 1, wherein said photosensitive resin is a positive photosensitive resin.
- 7. The method according to claim 1, further comprising the steps of:

forming an insulating layer on the surface of said base substrate so as to cover said second conductor layer;

forming a via hole in said insulating layer, said via hole extending to reach said second conductor layer; and

forming a via conductor covering a surface of said insulating layer at least in the vicinity of an opening of said via hole and coupled to said second conductor layer.

8. The method according to claim 1, wherein said

first conductor layer comprises copper and said second conductor layer comprises copper.

- 9. The method according to claim 1, wherein the light is ultraviolet light.
- 10. The method according to claim 1, wherein said base substrate comprises a copper-clad laminate board.
- 11. The method according to claim 1, wherein said first conductor layer forms a through hole conductor and said second conductor layer forms a capped conductor.